Chiccine, Catherine

From: Madonia, Joseph < Joseph.Madonia@btlaw.com>

Sent: Wednesday, January 25, 2023 9:54 AM

To: Chiccine, Catherine

Cc: Knowles, Susan B; Madonia, Joseph

Subject: FW: Ameren - City of St. Charles License Access Agreement Draft

Attachments: Ameren AND PCK REDLINE Comments to City License Granting Access to Amern.docx; St. Charles

License Granting Access to Ameren - REVISED V2 01-06-23.docx

Cathie - Here is our latest correspondence with the City re: access

Joseph Madonia | Partner

Barnes & Thornburg LLP

One North Wacker Drive, Suite 4400, Chicago, IL 60606-2833

Direct: (312) 214-5611 | Fax: (312) 759-5646



Atlanta | California | Chicago | Delaware | Indiana | Michigan | Minneapolis Ohio | Raleigh | Salt Lake City | Texas | Washington, D.C.

From: Mark Leadlove

Sent: Saturday, January 21, 2023 12:53 PM **To:** 'Portia Kayser' < <u>pkayser@harrisdowell.com</u>>

Cc: Joseph Madonia (jmadonia@btlaw.com) (jmadonia@btlaw.com) <jmadonia@btlaw.com>

Subject: FW: Ameren - City of St. Charles License Access Agreement Draft

Portia,

We reviewed your comments to the proposed further revisions to the access agreement of January 11 (your annotated document is attached). There are numerous sections of the draft agreement to which you simply indicate a provision to be unacceptable, without explanation. I am happy to talk with you about Ameren's position, and would welcome a meeting (although a telephone call is acceptable). But there are a few items that are worthwhile noting that are difficult for Ameren to reconsider. For example, Ameren cannot agree that the access agreement be terminable at will by the city (see section 3). The purpose of the access agreement is to meet EPA's requirements. Giving the city the right to terminate at will is not necessary except to possibly frustrate the testing required by the EPA. Additionally as another example, Ameren cannot allow the city to among other things, "use, operate, modify, or change" any of Ameren's piezometers in whole or part (see section 6). Once again, Ameren is willing to discuss information and data the city might desire if the city truly believes it is not receiving appropriate information.

Your email of January 11 also continues to seek an agreement that would allow the city access to the Ameren substation property to sample (see section 27). As noted earlier, Ameren cannot agree to the concept of such an agreement. In addition to the serious safety concerns and the lack of any EPA mandate for this request as noted in my email of January 5, as you are aware Ameren will be undertaking remediation activities at the substation parcel. City access to that parcel during this time risks interfering with those remediation activities. Consistent with its approach, Ameren is willing to discuss additional data requested by the City.

Finally, I have been informed that Exhibit B and Exhibit C to the revised draft agreement are not consistent with the EPA's testing requirements. Ameren is willing to document protocol and testing requirements in the agreement, but the terms should be consistent with the requirements of the EPA.

Ameren is frustrated with the city's assertions – repeated in your email -- that Ameren has not shared critical information and that the public health has been endangered; these assertions are simply not true. If the city reasonably desires certain additional information from Ameren, we can certainly discuss those requests, but your comments in this regard lack basis.

The conditions that the City continues to demand are unreasonable, unnecessary and, therefore, unlawful. There is no law that requires Ameren to agree to unreasonable access conditions in order to carry out our EPA-imposed obligations at a Superfund site. To the contrary, the National Contingency Plan regulations allows EPA to *require* the City to provide access *without conditions* if the City's unreasonable demands persist. Those regulations provide as follows:

If consent is not granted under the authorities described in <u>paragraph (d)(1)</u> of this section, **or if consent is conditioned in any manner**, EPA, or the appropriate <u>federal agency</u>, may issue an order pursuant to section 104(e)(5) of <u>CERCLA</u> directing compliance with the request for access made under § 300.400(d)(1). EPA or the appropriate <u>federal agency</u> may ask the Attorney General to commence a civil action to compel compliance with either a request for access or an order directing compliance. 40 CFR 300.400(d)(4)(1)(emphasis added).

Ameren remains willing to work cooperatively with the City to collect and exchange data and to maintain a transparent line of communications, but we cannot agree to enter agreements that violate EPA policies as well as the letter and spirit of the Superfund laws that govern this project.

I am available much of the week of January 30 for a meeting or a call, particularly after Tuesday of that week. Please let me know what works for you, and whether you desire a call or a meeting.

Thank you.

Mark



MARK LEADLOVE

Partner and Co-Leader of Business & Commercial Disputes Practice Group BRYAN CAVE LEIGHTON PAISNER LLP - St. Louis, MO USA mbleadlove@bclplaw.com

T: +1 314 259 2230 M: +1 314 724 0078

From: Portia Kayser < pkayser@harrisdowell.com > Sent: Wednesday, January 11, 2023 8:18 PM
To: Mark Leadlove < mbleadlove@bclplaw.com >

Cc: Joseph Madonia (jmadonia@btlaw.com) (jmadonia@btlaw.com) <jmadonia@btlaw.com>

Subject: RE: Ameren - City of St. Charles License Access Agreement Draft

Mark,

Attached please find my comments to your proposed revisions and a clean copy of the access agreement. It may be best for us to set up a call to discuss. The primary issues are:

- 1. Termination of the agreement cannot be solely based upon the EPA's monitoring activities. There are a number of changes in the circumstances which could cause the City to terminate the agreement. We do not anticipate needing to do so, but will not remove that right from the agreement.
- 2. The requirement that Ameren provide both preliminary and final reports is necessary for the protection of the residents. Without transparency between Ameren and the City, the risk to the public is untenable. The City proposed providing Ameren with both preliminary and final reports as part of its reciprocal agreement. Most importantly, the preliminary reports will allow the City to take immediate action if there is any indication of a hazard to the public drinking water. Waiting for "final" reports puts residents at risk and that is unacceptable.
- 3. Paragraph 6 of the agreement retaining the City's equal access to conduct its own testing using the same testing protocols as required of Ameren, is required. The City has an obligation to its citizens to ensure safe drinking water. It is evident from the course of conduct over the past several years that Ameren has not shared critical information on exceedances which put the health and welfare of St. Charles residents at risk and the City will not relinquish its right to conduct separate testing and monitoring on its own property.
- 4. The insurance requirements are consistent with any/all other contractors performing work on City property.
- 5. The City stands by its request to have access to conduct independent testing of the contamination at Ameren's substation. We are open to discussing how that can be accomplished short of Ameren agreeing to a reciprocal/mirror access agreement. As you are aware, the City has retained experts to evaluate the contamination and continued risks to the wellfield. Independent testing of the substation property contamination by 212 Environmental will further everyone's understanding of the migration of the contaminants so that we can work together to remediate the risk and ensure safe drinking water.

I look forward to your comments.

Portia

Portia C. Kayser | Partner

Harris Dowell Fisher & Young L.C. 15400 South Outer 40, Suite 202, Chesterfield, MO 63017

Office: (636) 532-0300 | Direct (314) 735-2288 Cell: (618) 531-0345 | Fax: (636) 532-0246

Email: pkayser@harrisdowell.com Website: www.harrisdowell.com



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From: Mark Leadlove < mbleadlove@bclplaw.com >

Sent: Thursday, January 5, 2023 3:27 PM

To: Portia Kayser < pkayser@harrisdowell.com>

Cc: Joseph Madonia (jmadonia@btlaw.com) (jmadonia@btlaw.com) <jmadonia@btlaw.com>

Subject: Ameren - City of St. Charles License Access Agreement Draft

Portia,

I acknowledge receipt of the draft license agreement you provided in mid-December regarding access to the city right of way related to the Ameren piezometers. We have reviewed and attach a document containing Ameren's proposed revisions to that agreement. The insurance provisions have been revised to reflect levels and scope of coverage required by Ameren of its contractors. Given the limited nature of the contemplated activities (i.e. periodic groundwater sampling of unoccupied property) we believe the proposed coverage is appropriate and consistent with that scope of work. Please let us know your thoughts and comments to Ameren's proposed revisions.

You also provided a draft license agreement that would allow the City of St. Charles access to the Ameren substation property. For a variety of reasons, Ameren cannot agree to the concept of such an agreement. Among others, the nature of the substation property provides a high degree of risk to anyone who would enter onto that property (different than the city's right-of-way). As a result, Ameren takes a number of significant safety measures regarding that property that would be implicated by such a license access agreement. Additionally, the license access agreement to allow Ameren to access its piezometers is to effectuate testing that is required of Ameren by the EPA at those piezometer sites. There is no similar testing requirement imposed on the city of any part of the Ameren substation parcel. There are no mirror image obligations to justify the city's proposed access to the Ameren substation parcel.

Mark



MARK LEADLOVE

Partner and Co-Leader of Business & Commercial Disputes Practice Group mbleadlove@bclplaw.com
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bclplaw.com

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LICENSE ACCESS AGREEMENT

THIS LICENSE ACCESS AGREEMENT ("Agreement") is dated this ____ day of December, 2022 by and between the City of Saint Charles, Missouri, a Missouri charter city, having an office at 200 N. Second Street, St. Charles, Missouri 63301 ("Licensor" or "City") and Union Electric d/b/a Ameren Missouri, a Missouri corporation, having its principal office at 1901 Chouteau Avenue, St. Louis, Missouri 63103 ("Licensee" or "Ameren").

WHEREAS, Ameren, including its employees, agents, consultants, and contractors have requested permission of the City to enter onto property which is owned, controlled possessed, or for which the City has legal access which are more specifically identified and incorporated by reference on the attached **Exhibit A** and collectively referred to as (the "Premises").

WHEREAS, Ameren desires periodic access to the Premises for the purpose of conducting the EPA mandated and supervised environmental testing which is specifically identified on **Exhibit B** (the "Testing").

WHEREAS, the parties desire by this Agreement to provide for the licensing by City to Ameren the right of access to the Premises for the purpose of conducting the Testing.

WHEREAS, City will allow Ameren access to the Premises to perform Testing in accordance with the terms and conditions of this Agreement.

NOW THEREFORE, in consideration of and conditioned upon the mutual covenants, promises and obligations contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the City and Ameren agree as follows:

- 1. <u>Recitals</u>. The recitals stated above in this Agreement are adopted by reference.
- 2. <u>Grant of License</u>. City grants to Ameren a non-exclusive license, subject to all rights, interest, and without limitation to third party estates including leases, rights of ways,

easements, liens or other known encumbrances, and upon the terms and conditions contained herein. Ameren shall use the Premises solely for the purposes stated herein and in compliance with Paragraph Number 5 of this License Access Agreement.

3. <u>License Period</u>. The License Period shall commence upon the last date of execution of this Agreement ("Effective Date"). Notwithstanding anything contrary in this Agreement it shall terminate upon completion of monitoring activities as determined by United States Environmental Protection Agency.



- 4. <u>License Fee</u>. Ameren shall pay a License Fee to the City in the amount of \$100 per year with the first payment being due upon the execution of this Agreement and thereafter on each succeeding anniversary date of the execution. Ameren shall additionally reimburse City for all utility charges, if any, that Ameren incurs during the term of the Agreement at the entirety of the Premises, including water, sewer, gas, and electric.
- 5. <u>Permitted Uses</u>. The Premises may be accessed by Ameren solely for the purpose of performing the Testing. All Testing shall be performed by Ameren in strict compliance to the Protocols of Testing set forth on attached **Exhibit C**, which is incorporated by reference. Ameren shall provide to the City at no cost or expense to the City all final reports, test data, analyses and any associated information that Ameren or its consultants submit to any governmental entity or third party related to the Testing.
- 6. <u>Liability Limitation</u>. City shall not be liable to Ameren in the event of any damage to, theft, or loss of any equipment or property, or for any personal injury associated with the Testing or the Premises, and not attributable solely to the City's own negligence. Ameren shall look to its own insurance coverage (and to any self-insured portion of the damage, theft, or loss), if any, for recovery in the event of any and all such damages, thefts, or losses, and Ameren hereby releases City from all such liability.

- 7. <u>Indemnity</u>. Ameren hereby agrees to defend, indemnify, and save free and harmless City and its elected officials, officers, directors, employees, and agents, from and against any and all claims, demands, fines, suits, actions, proceedings, orders, decrees, and judgments of any kind or nature, except for those arising solely from the City's own negligence, by or in favor of anyone whomsoever and from and against any and all costs and expenses, including attorney's fees, from or in connection with loss of life, bodily or personal injury, or property damage arising, directly or indirectly, out of or from or on account of any occurrence in, upon, at, or from the Premises, or occasioned wholly or in part through the use and occupancy of the Premises, or any use, act, or omission of Ameren or its employees and/or agents, or their respective employees, agents, contractors, guests, or invitees in, upon, at, or from the Premises or its appurtenances or any common areas.
- 8. <u>Insurance</u>. Ameren and any of its third-party contractors shall, at their own cost and expense, maintain and keep in force insurance coverage as set forth herein, at all times during the License Period. The City along with its elected officials, officers, agents and employees, shall be named as additional insureds for Ongoing Operations and Products/Completed Operations in the Commercial General Liability Policy, which must be primary and noncontributory with respect to the additional insureds. All entities shall continue to carry Completed Operations Liability Insurance for at least three (3) years after completion of the work conducted on the Premises. To the fullest extent permitted by the State of Missouri, a Waiver of Subrogation Clause shall be added to the General Liability, Automobile, and Workers' Compensation policies in favor of the City of St. Charles. This clause shall apply to both the City of St. Charles and its elected officials, officers, agents and employees, with respect to all work performed during the policy term. No policy required shall contain any provision (by endorsement or otherwise) purporting to deny coverage for losses caused by the acts or omissions of any entity.

Commercial General Liability Insurance

- \$1,000.000 Each Occurrence Limit (Bodily Injury and Property Damage)
- \$1,000.000 General Aggregate per Project
- \$1,000,000 Products & Completed Operations Aggregate
- \$1,000.000 Personal and Advertising Injury Limit

Business or Commercial Automobile Liability Insurance

- \$1,000,000 combined single limit per accident
- Must include owned, non-owned, and hired vehicles.
- If any hazardous substances are transported must include a MCS-90 endorsement and Motor Carriers Act of 1980 coverage applicable in the jurisdiction where the operations of the insured are performed.

Excess or Umbrella Liability

- \$1,000,000 occurrence/aggregate
- 9. <u>Damage to the Premises</u>. Ameren shall be solely responsible for any damage to the Premises caused by Ameren. Furthermore, Ameren shall leave all Premises in the same condition as found on the Effective Date. Any damage to any of the Premises shall be repaired promptly by a contractor reasonably acceptable to City at Ameren's cost.
- 10. <u>No Waiver of Sovereign Immunity</u>. Nothing in this Agreement shall be construed, interpreted or deemed to constitute a waiver of any governmental immunity including, but not limited to, the City's Sovereign Immunity or any elected or appointed official, agent, employee or representative of the City's Official or Qualified Immunity, nor a waiver of the Public Duty Doctrine.
- 11. <u>Default</u>. Any waiver by the City of any default or defaults shall not constitute a waiver of the right to terminate this Agreement for any subsequent default or defaults, nor shall any such waiver in any way affect the City's ability to enforce any part of this Agreement. The remedy set forth herein shall be in addition to, and not a limitation of, any other remedies that the City may have at equity or law.
- 12. <u>Quiet Enjoyment</u>. No Covenant of Enjoyment is made by the City. Further, the City makes no representation as to, and does not warrant, its title to the Premises nor shall the City undertake to defend Ameren in the peaceful access, use or possession thereof.
- 13. <u>No Warranties</u>. Unless otherwise expressly provided for herein, the City makes no representations or warranties, express or implied, with respect to the Premises or this Agreement,

including but not limited to without any limitation any warranty of merchantability, habitability or fitness for a particular purpose.

- 14. <u>Party Approvals</u>. Ameren and City represents and warrant that all necessary approvals have been obtained prior to execution of this Agreement, and that the person signing this Agreement has written authority to sign on behalf of the respective party.
- 15. Governing Law and Venue. This Agreement has been executed in the State of Missouri, and shall be governed, construed, and interpreted in accordance with the laws of the State of Missouri. The parties agree to submit to the venue of St. Charles County, Missouri, or if the matter is removal to the Federal Court, then to the Federal District Court of the Eastern District of Missouri.
- 16. <u>Amended or Assigned</u>. This Agreement may not be amended, modified, altered or assigned without the prior written consent of the Parties executed by authorized agents of the party.
- 17. <u>Survival</u>. Section 7 (Indemnification), Section 8 (Insurance) and shall survive the termination of this Agreement.
- 18. <u>Recordation</u>. It is understood and agreed that this Agreement shall not be recorded at the Recorder of Deeds office.
- 19. Severability, Partial Invalidity. If any term, covenant, condition or provision of this Agreement or the application of this Agreement to any person or circumstance shall, at any time or to any extent, be invalid or unenforceable, the remainder of this Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected by the partial invalidity, and each term, covenant, condition and provision of this Agreement shall be valid and be enforced to the fullest extent permitted by law.

20. <u>No Third-Party Beneficiaries</u>. This Agreement constitutes a contract solely among and between the City and Ameren. No third party has any beneficial interest in or derived from this Agreement.

21. <u>Proof of Lawful Presence</u>. Ameren acknowledges approval of this Agreement requires compliance with Section 208.009, RSMo.

22. <u>Notices</u>. Any notice required or permitted to be given hereunder by one party to other shall be in writing and the same shall be given and shall be deemed to have been served and given if: (i) placed in the United States mail, certified, return receipt requested; or (ii) email address identified below; or (iii) deposited into the custody of a nationally recognized overnight delivery service, addressed to the party to be notified at the address for such party specified below, or to such other address as the party to be notified may designate by giving the other party no less than thirty (30) days' advance written notice of such change in address.

If to City: City of St. Charles

200 North Second Street St. Charles, MO 63301

Attention: Director of Administration Lawrence.Dobrosky@stcharlescitymo.gov

With a copy to: City of St. Charles, Missouri

200 North Second Street St. Charles, MO 63301 Attention: City Attorney

Michael.cullen@stcharlescitymo.gov

If to Ameren: Union Electric (Ameren Missouri)

1901 Chouteau Avenue St. Louis, MO 63103 Attention: Mark C. Birk

E-mail: _____

With a copy to:

23. <u>Counterparts</u>. This Agreement may be executed in counterparts, each of which shall be an original, but all of which shall constitute one and the same instrument.

- 24. <u>Effective Date of Agreement; Execution Procedure</u>. This Agreement is effective when executed by the City. Ameren shall deliver two executed originals to the City no later than 5:00 p.m. on December, 2022.
- 25. <u>Number; Section Headings</u>. The section headings used in this Agreement are for reference and convenience only and shall not enter into the interpretation of this Agreement.
- 26. <u>Entire Agreement</u>. The foregoing constitutes the entire agreement between the parties and may be modified only by a writing signed by both parties.

IN WITNESS WHEREOF the parties hereto have executed this License Agreement the day and year first written above.

LICENSEE:	LICENSOR:
UNION ELECTRIC COMPANY, d/b/a AMEREN MISSOURI	CITY OF SAINT CHARLES, MISSOURI
By Name: Mark C. Birk Title: President	By Name: Daniel J. Borgmeyer Title: Mayor
	Attest:
	City Clerk

EXHIBIT A (PREMISES)

The following provides the location identification and coordinates for each of the testing locations included within this License Access Agreement. Any additional testing locations will require additional written consent of Licensor. The locations include:

Location	X	Y
PZ-1	811374.95	1089325.06
PZ-2	811452.33	1089350.45
PZ-3	811549.98	1089385.91
PZ-4	811578.81	1089004.86
PZ-5	811596.13	1088860.34
PZ-6	811587.67	1088677.21
PZ-7	811615.18	1088714.38
PZ-8	811634.92	1088788.07
PZ-9	811579.79	1088968.45
PZ-10	811577.82	1089041.27
PZ-11	811589.80	1089400.08

EXHIBIT B

TESTING

The following test shall be allowed to be performed pursuant to this License Access Agreement. Any test not specifically listed shall require prior written consent of Licensor:

- 1. Fluid Level Monitoring in Groundwater
- 2. Groundwater Sampling for Laboratory Analysis
- 3. Influent and Effluent Sampling at the Drinking Water Treatment Plant for Laboratory Analysis

Descriptions of the testing protocols for each of the above-listed activities is provided in Exhibit C.

EXHIBIT CTESTING PROTOCOL

The Licensee shall provide the Licensor notification no less than five business days prior to the commencement of any activities that are to be performed on the premises. The notification shall include the anticipated daily start and finish time for all activities. This will allow the licensor or designated appointee to be present during the activities in the event that the Licensor elects to have a representative present during performance of the work.

Following the completion of the work, the Licensee shall provide to Licensor all field-generated data within five business days including: field notes, photographs, fluid level measurements, and field-measured groundwater parameters (i.e., dissolved oxygen, pH, temperature, oxidation-reduction potential, conductivity, turbidity). The Licensee will provide all laboratory-generated analytical reports with quality control data, as well as electronic data deliverables in a format to be provided by the Licensor. The contracted laboratory shall be instructed in writing to provide all laboratory analytical data directly to Licensee simultaneously to providing it to the Licensor.

The following testing protocol shall be employed for each of the various test identified in Exhibit B:

Exhibit C-1 – Standard Operating Procedure for Fluid Level Monitoring in Groundwater

The Licensee shall utilize the Standard Operating Procedure (SOP) for conducting fluid level monitoring in groundwater at monitoring locations on the Licensor property.

Purpose

This Standard Operating Procedure (SOP) is applicable during the conducting of water level measurements in monitoring wells, piezometers, and groundwater extraction wells during field investigations at hazardous and non-hazardous sites.

Summary of Method

The objective of water level measurements is to gain accurate measurements is to gain accurate measurements (to within 0.01 feet of the depth of groundwater for use during well installation, in the recording of data for the preparation of groundwater elevation contour maps, purge volume calculations during groundwater sampling, slug tests, packer tests, and pumping tests.

Procedures

The following provides the procedures that field technicians will follow during the measurement of fluid levels within groundwater monitoring locations.

- 1. Prior to collecting fluid level measurements, observe the condition of the well (protective casing, concrete collar, lock in place, etc.) to note any potential repairs that may need to be made to the location.
- 2. The water level indicator will be decontaminated using a phosphate-free decontamination solution and rinsed with potable water followed by a rinse with distilled water.
- 3. Identify the measuring point markings or notch on the riser or casing (if present).
- 4. Using a previously decontaminated water level indicator, turn on the meter, check the audible indicator, reel the electronic probe into the well riser (within the increments visible) slowly until the meter sounds. Grasp and withdraw the tape and lower it again slowly until the sound is again audible. Check the depth to water on the tape and record the value to within 0.01 feet on the fluid level field form.
- 5. Procedures utilized during water level measurements where free phase petroleum products are floating on the water table should be modified to include the use of an oil/water interface probe. The procedures during the use of this probe should be implemented similarly and by manufacturers' specifications. Through the use of this probe, product thickness can be determined.
- 6. Following collection of the fluid level measurement, the fluid level probe and tape should be decontaminated with the procedures described in step 2.

Exhibit C-2 – Standard Operating Procedure for Groundwater Sampling for Laboratory Analysis

The Licensee shall utilize the Standard Operating Procedure (SOP) for conducting groundwater sampling for laboratory analysis at monitoring locations on the Licensor property.

Purpose

This Standard Operating Procedure (SOP) is applicable to the collection of representative samples from groundwater for the purpose of submitting for laboratory analysis. The methods described are applicable to groundwater samples collected from either temporarily or permanently installed groundwater monitoring wells.

Summary of Method

Groundwater samples for laboratory analysis will be collected by field technicians utilizing low-flow (minimal drawdown) sampling methodology (Puls and Barcelona 1996). Low-flow sampling allows for groundwater samples to be collected that are representative of groundwater conditions, while minimizing the generation of purge water.

Procedures

The following provides the procedures that field technicians will follow during the collection of representative groundwater samples for the purpose of submitting for laboratory analysis.

- 1. Prior to the collection of any groundwater sample, groundwater elevations will be determined within the well by measuring the depth to groundwater using a SolinstTM, or equivalent, water level indicator. The depth to groundwater will be recorded to an accuracy of 0.01-foot from the surveyed measuring point indicated on the well. The water level indicator will be decontaminated using a phosphate-free decontamination solution and rinsed with potable water followed by a rinse with distilled water.
- 2. Low-flow sampling utilizes a ProActiveTM Monsoon® XL, or equivalent, submersible pump with a flow controller and dedicated low-density polyethylene (LDPE) tubing. Prior to installing the temporary groundwater sampling pump at each well location, the submersible pump will be decontaminated by washing the outer surface with a phosphate-free decontamination solution. The internal components of the pump will be cleaned by placing the pump into a 5-gallon bucket containing a phosphate-free decontamination solution and allowing the pump to operate for several minutes to circulate the decontamination solution through the impellers and pump housing. The internal and external components of the pump will be rinsed with potable water and again with distilled water prior to being connected to the dedicated LDPE tubing.
- 3. The submersible pump and dedicated tubing will be slowly lowered into the well to minimize contact with the well casing and minimize disturbance to the water column. The pump will be set to the desired depth interval and secured to ensure that the depth of the pump does not lower during the course of collecting the groundwater sample. The pumping rate should be set between 0.1 and 0.5 liters per minute using the flow controller to minimize drawdown and avoid undue pressure, temperature, or other physical disturbances to groundwater over the sampling interval. All purge water will be containerized and disposed of in accordance with federal, state, and local requirements.
- 4. Prior to engaging the sample pump, connect the sample tubing to a flow-cell that will allow for the monitoring of groundwater quality parameters including temperature, pH, specific conductance, dissolved oxygen, oxidation-reduction potential, and turbidity. The multi-parameter groundwater quality meter will be calibrated daily, in accordance with the manufacturer's guidelines, using a factory-prepared calibration standard. Groundwater quality parameters will be monitored over five-minute intervals during purging and recorded onto the field form. The following stabilization criteria will be achieved over three a minimum of three consecutive readings before collecting the groundwater sample for laboratory analysis:

• Temperature: $\pm 3\%$

• pH: ±0.1

• Specific Conductance: ±3%

• Dissolved Oxygen: ± 0.3 milligrams per liter

• Oxidation-Reduction Potential: ±10 millivolts

• Turbidity: $\pm 10\%$ or < 10 nephelometric turbidity units

- 5. Once the stabilization criteria has been achieved over three successive intervals, groundwater samples can be collected in appropriate containers, which may include preservatives depending on the desired analyses. Groundwater samples should be collected in a manner to minimize headspace (if required) and agitation. The samples labels and chain of custody should be filled out completely including sample identification, date and time of collection, project name, client name, field personnel initials, requested analyses, and preservation methods. Groundwater samples should immediately be placed in a cooler with ice. Groundwater samples will be transported on ice to the laboratory for analysis. The list of analytes to be included within the laboratory analysis is provided in Exhibit C-4.
- 6. Following collection of the groundwater sample, the submersible pump should be removed from the well and decontaminated in accordance with the procedures described in step 2. The sample tubing should be disposed of in accordance with federal, state, and local requirements. The flow-cell and multi-parameter groundwater quality meter will be decontaminated using a phosphate-free decontamination solution and rinsed with potable water followed by a rinse with distilled water.

Exhibit C-3 – Standard Operating Procedure for Influent and Effluent Sampling for Laboratory Analysis

The Licensee shall utilize the Standard Operating Procedure (SOP) for conducting influent and effluent sampling for laboratory analysis at drinking water treatment plant on the Licensor property.

Purpose

This Standard Operating Procedure (SOP) is applicable to the collection of representative samples from the influent and effluent at the drinking water treatment plant for the purpose of submitting for laboratory analysis.

Summary of Method

Influent and effluent samples will be collected at the drinking water treatment plant to ensure that volatile organic compounds (VOC) are not present in drinking water.

Procedures

The following provides the procedures that field technicians will follow during the collection of representative influent and effluent water samples at the drinking water treatment plant for the purpose of submitting for laboratory analysis.

- 1. Coordinate with the Licensor to obtain access to the drinking water treatment plant.
- 2. Turn on the sample port at the influent and effluent. Purge the sample line for approximately five minutes to ensure a representative sample is collected. Water samples shall be collected in appropriate containers, which may include preservatives depending on the desired analyses. Water samples should be collected in a manner to minimize headspace (if required) and agitation. The samples labels and chain of custody should be filled out completely including sample identification, date and time of collection, project name, client name, field personnel initials, requested analyses, and preservation methods. Water samples should immediately be placed in a cooler with ice. Groundwater samples will be transported on ice to the laboratory for analysis. The list of analytes to be included within the laboratory analysis is provided in Exhibit C-4.
- 3. Following the collection of the water samples, turn off the sample port for the influent and effluent.

Exhibit C-4 – List of Analytes for Laboratory Analysis

Petroleum-Related VOCs	CAS Number
1,2,3-Trimethylbenzene	526-73-8
1,2,4-Trimethylbenzene	95-63-6
1,2-Dibromoethane	106-93-4
1,2-Dichloroethane	107-06-2
1,3,5-Trimethylbenzene	108-67-8
Benzene	71-43-2
Bromobenzene	108-86-1
Dibromomethane	74-95-3
Ethane	74-84-0

Ethyl methacrylate	97-63-2
Ethylbenzene	100-41-4
Ethylene	74-85-1
Heptane	142-82-5
Hexane	110-54-3
Isopropylbenzene	98-82-8
m,p-Xylene	179601-23-1
Methane	74-82-8
MTBE	1634-04-4
Naphthalene	91-20-3
n-Butylbenzene	104-51-8
Nitrobenzene	98-95-3
o-Xylene	95-47-6
Styrene	100-42-5
Toluene	108-88-3
Solvents	CAS Number
Tetrachloroethene	127-18-4
Trichloroethene	79-01-6
cis-1,2-Dichloroethene	156-59-2
trans-1,2-Dichloroethene	156-60-5
1,1-Dichloroethene	75-35-4
Vinyl Chloride	75-01-4
1,1,1,2-Tetrachloroethane	630-20-6

1,1,1-Trichloroethane	71-55-6
1,1,2,2-Tetrachloroethane	79-34-5
1,1,2-Trichloroethane	79-00-5
1,1-Dichloroethane	75-34-3
1,2,3-Trichlorobenzene	87-61-6
1,2,3-Trichloropropane	96-18-4
1,4-Dioxane	123-91-1
2-Butanone	78-93-3
2-Chlorotoluene	95-49-8
2-Hexanone	591-78-6
2-Nitropropane	79-46-9
4-Chlorotoluene	106-43-4
4-Methyl-2-Pentanone	108-10-1
Acetone	67-64-1
Acetonitrile	75-05-8
Acrylonitrile	107-13-1
Carbon tetrachloride	56-23-5
Chlorobenzene	108-90-7
Cyclohexanone	108-94-1
Diethyl ether	60-29-7
Ethyl acetate	141-78-6
Hexachlorobutadiene	87-68-3
n-Butyl acetate	123-86-4
Pentachloroethane	76-01-7

p-Isopropyl-toluene	99-87-6
Propionitrile	107-12-0
sec-Butylbenzene	135-98-8
tert-Butylbenzene	98-06-6
Tetrahydrofuran	109-99-9
Water Treatment	CAS Number
1,1,2-Trichlorotrifluor-ethane	76-13-1
1,1-Dichloro-2-Propanone	513-88-2
1,1-Dichloropropene	563-58-6
1,2,4-Trichlorobenzene	120-82-1
1,2-Dibromo-3-Chloropropane	96-12-8
1,2-Dichlorobenzene	95-50-1
1,2-Dichloropropane	78-87-5
1,3-Dichlorobenzene	541-73-1
1,3-Dichloropropane	142-28-9
1,4-Dichlorobenzene	106-46-7
1-Chlorobutane	109-69-3
2,2-Dichloropropane	594-20-7
2-Chloro-1,3-Butadiene	126-99-8
2-Chloroethyl vinyl ether	110-75-8
Acrolein	107-02-8
Allyl Chloride	107-05-1
Bromo-chloromethane	74-97-5

Bromo-dichloromethane	75-27-4
Bromoform	75-25-2
Bromomethane	74-83-9
Carbon Disulfide	75-15-0
Chloroethane	75-00-3
Chloroform	67-66-3
Chloromethane	74-87-3
cis-1,3-Dichloropropene	10061-01-5
cis-1,4-Dichloro-2-butene	1476-11-5
Dibromo-chloromethane	124-48-1
Dichloro-difluoromethane	75-71-8
Hexachloroethane	67-72-1
Methacrylonitrile	126-98-7
Methyl acrylate	96-33-3
Methyl iodide	74-88-4
Methyl methacrylate	80-62-6
Methylene chloride	75-09-2
n-Propylbenzene	103-65-1
trans-1,3-Dichloropropene	10061-02-6
Trans-1,4-Dichloro-2-Butene	110-57-6
Trichloro-fluoromethane	75-69-4
Vinyl acetate	108-05-4
Inorganics	CAS Number

Nitrogen, Nitrate (as N)	14797-55-8
Nitrogen, Nitrite (as N)	14797-65-0

LICENSE ACCESS AGREEMENT

THIS LICENSE ACCESS AGREEMENT ("Agreement") is dated this ____ day of December, 2022 by and between the City of Saint Charles, Missouri, a Missouri charter city, having an office at 200 N. Second Street, St. Charles, Missouri 63301 ("Licensor" or "City") and Union Electric d/b/a Ameren Missouri, a Missouri corporation, having its principal office at 1901 Chouteau Avenue, St. Louis, Missouri 63103 ("Licensee" or "Ameren").

WHEREAS, Ameren, including its employees, agents, consultants, and contractors have requested permission of the City to enter onto property which is owned, controlled possessed, or for which the City has legal access which are more specifically identified and incorporated by reference on the attached **Exhibit A** and collectively referred to as (the "Premises").

WHEREAS, Ameren desires periodic access to the Premises for the purpose of conducting the EPA mandated and supervised environmental testing which is specifically identified on **Exhibit B** (the "Testing").

WHEREAS, the parties desire by this Agreement to provide for the licensing by City to Ameren the right of access to the Premises for the purpose of conducting the Testing.

WHEREAS, City will allow Ameren access to the Premises to perform Testing in accordance with the terms and conditions of this Agreement.

NOW THEREFORE, in consideration of and conditioned upon the mutual covenants, promises and obligations contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the City and Ameren agree as follows:

- 1. <u>Recitals</u>. The recitals stated above in this Agreement are adopted by reference.
- 2. <u>Grant of License</u>. City grants to Ameren a non-exclusive license, subject to all rights, interest, and without limitation to third party estates including leases, rights of ways,

easements, liens or other known encumbrances, and upon the terms and conditions contained herein. Ameren shall use the Premises solely for the purposes stated herein and in compliance with Paragraph Number 5 of this License Access Agreement.

- 3. <u>License Period</u>. The License Period shall commence upon the last date of execution of this Agreement ("Effective Date"). Notwithstanding anything contrary in this Agreement it shall terminate the earlier of: 1) completion of monitoring activities as determined by United States Environmental Protection Agency; or 2) at any time, for any reason, upon either party providing the other party five calendar day's written notice of termination
- 4. <u>License Fee</u>. Ameren shall pay a License Fee to the City in the amount of \$100 per year with the first payment being due upon the execution of this Agreement and thereafter on each succeeding anniversary date of the execution. Ameren shall additionally reimburse City for all utility charges, if any, that Ameren incurs during the term of the Agreement at the entirety of the Premises, including water, sewer, gas, and electric.
- 5. Permitted Uses. The Premises may be accessed by Ameren solely for the purpose of performing the Testing. All Testing shall be performed by Ameren in strict compliance to the Protocols of Testing set forth on attached **Exhibit C**, which is incorporated by reference. Ameren shall provide to the City at no cost or expense to the City all preliminary and final reports, test data, analyses and any associated information that Ameren or its consultants submit to any governmental entity or third party related to the Testing.
- 6. <u>City Right of Access and Alteration of Premise</u>. City reserves its right to access any structures, piezometers, testing wells, and other type appurtenance or property placed on the Premises by Ameren, if any, at any time without notice to Ameren. City further reserves the right to maintain, renew, use, operate, change, modify or relocate any existing pipe, power, communication lines and appurtenances, including piezometers, testing wells, and other facilities or structures of like character upon, over, under or across the Premises, if any, and to construct, maintain, renew, use, operate, change, modify and relocate any pavement or sidewalks or additional facilities or structures upon, over, under or across the Premises and use the Premises in

any manner for public purposes as the City, in its sole discretion deems appropriate. City access to the Premise for Testing shall be conditioned upon and being in compliance with the Testing Protocol.

- 7. <u>Liability Limitation</u>. City shall not be liable to Ameren in the event of any damage to, theft, or loss of any equipment or property, or for any personal injury, regardless of the cause, associated with the Testing or the Premises, and not attributable solely to the City's own negligence. Ameren shall look to its own insurance coverage (and to any self-insured portion of the damage, theft, or loss), if any, for recovery in the event of any and all such damages, thefts, or losses, and Ameren hereby releases City from all such liability.
- 8. <u>Indemnity</u>. Ameren hereby agrees to defend, indemnify, and save free and harmless City and its elected officials, officers, directors, employees, and agents, from and against any and all claims, demands, fines, suits, actions, proceedings, orders, decrees, and judgments of any kind or nature, except for those arising solely from the City's own negligence, by or in favor of anyone whomsoever and from and against any and all costs and expenses, including attorney's fees, from or in connection with loss of life, bodily or personal injury, or property damage arising, directly or indirectly, out of or from or on account of any occurrence in, upon, at, or from the Premises, or occasioned wholly or in part through the use and occupancy of the Premises, or any use, act, or omission of Ameren or its employees and/or agents, or their respective employees, agents, contractors, guests, or invitees in, upon, at, or from the Premises or its appurtenances or any common areas.
- 9. <u>Insurance</u>. Ameren and any of its third-party contractors shall, at their own cost and expense, maintain and keep in force insurance coverage as set forth herein, at all times during the License Period. The City along with its elected officials, officers, agents and employees, shall be named as additional insureds for Ongoing Operations and Products/Completed Operations in the Commercial General Liability Policy, which must be primary and noncontributory with respect to the additional insureds. All entities shall continue to carry Completed Operations Liability Insurance for at least three (3) years after completion of the work conducted on the Premises. To the fullest extent permitted by the State of Missouri, a Waiver of Subrogation Clause shall be added

to the General Liability, Automobile, and Workers' Compensation policies in favor of the City of St. Charles. This clause shall apply to both the City of St. Charles and its elected officials, officers, agents and employees, with respect to all work performed during the policy term. No policy required shall contain any provision (by endorsement or otherwise) purporting to deny coverage for losses caused by the acts or omissions of any entity.

Commercial General Liability Insurance

- \$1,000.000 Each Occurrence Limit (Bodily Injury and Property Damage)
- \$3,000.000 General Aggregate per Project
- \$3,000,000 Products & Completed Operations Aggregate
- \$1,000.000 Personal and Advertising Injury Limit

Business or Commercial Automobile Liability Insurance

- \$3,000,000 combined single limit per accident
- Must include owned, non-owned, and hired vehicles.
- If any hazardous substances are transported must include a MCS-90 endorsement and Motor Carriers Act of 1980 coverage applicable in the jurisdiction where the operations of the insured are performed.

Workers' Compensation and Employers' Liability Insurance

- \$3,000,000 Each Accident
- \$3,000,000 Each Employee for Injury by Disease
- \$3,000,000 Aggregate for Injury by Disease

Excess or Umbrella Liability

• \$5,000,000 occurrence/aggregate

Pollution Liability

- \$3,000,000 per occurrence
- \$3,000.000 General Aggregate per Project
- 10. <u>Damage to the Premises</u>. Ameren shall be solely responsible for any damage to the Premises caused by Ameren. Furthermore, Ameren shall leave all Premises in the same condition as found on the Effective Date. Any damage to any of the Premises shall be repaired promptly by a contractor reasonably acceptable to City at Ameren's cost.

- 11. <u>No Waiver of Sovereign Immunity</u>. Nothing in this Agreement shall be construed, interpreted or deemed to constitute a waiver of any governmental immunity including, but not limited to, the City's Sovereign Immunity or any elected or appointed official, agent, employee or representative of the City's Official or Qualified Immunity, nor a waiver of the Public Duty Doctrine.
- 12. <u>Default</u>. Any waiver by the City of any default or defaults shall not constitute a waiver of the right to terminate this Agreement for any subsequent default or defaults, nor shall any such waiver in any way affect the City's ability to enforce any part of this Agreement. The remedy set forth herein shall be in addition to, and not a limitation of, any other remedies that the City may have at equity or law.
- 13. <u>Quiet Enjoyment</u>. No Covenant of Enjoyment is made by the City. Further, the City makes no representation as to, and does not warrant, its title to the Premises nor shall the City undertake to defend Ameren in the peaceful access, use or possession thereof.
- 14. <u>No Warranties</u>. Unless otherwise expressly provided for herein, the City makes no representations or warranties, express or implied, with respect to the Premises or this Agreement, including but not limited to without any limitation any warranty of merchantability, habitability or fitness for a particular purpose.
- 15. <u>Party Approvals</u>. Ameren and City represents and warrant that all necessary approvals have been obtained prior to execution of this Agreement, and that the person signing this Agreement has written authority to sign on behalf of the respective party.
- 16. Governing Law and Venue. This Agreement has been executed in the State of Missouri, and shall be governed, construed, and interpreted in accordance with the laws of the State of Missouri. The parties agree to submit to the venue of St. Charles County, Missouri, or if the matter is removal to the Federal Court, then to the Federal District Court of the Eastern District of Missouri.

- 17. <u>Amended or Assigned</u>. This Agreement may not be amended, modified, altered or assigned without the prior written consent of the Parties executed by authorized agents of the party.
- 18. <u>Survival</u>. Section 7 (Indemnification), Section 8 (Insurance) and shall survive the termination of this Agreement.
- 19. <u>Recordation</u>. It is understood and agreed that this Agreement shall not be recorded at the Recorder of Deeds office.
- 20. <u>Severability, Partial Invalidity</u>. If any term, covenant, condition or provision of this Agreement or the application of this Agreement to any person or circumstance shall, at any time or to any extent, be invalid or unenforceable, the remainder of this Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected by the partial invalidity, and each term, covenant, condition and provision of this Agreement shall be valid and be enforced to the fullest extent permitted by law.
- 21. <u>No Third-Party Beneficiaries</u>. This Agreement constitutes a contract solely among and between the City and Ameren. No third party has any beneficial interest in or derived from this Agreement.
- 22. <u>Proof of Lawful Presence</u>. Ameren acknowledges approval of this Agreement requires compliance with Section 208.009, RSMo.
- 23. <u>Notices</u>. Any notice required or permitted to be given hereunder by one party to other shall be in writing and the same shall be given and shall be deemed to have been served and given if: (i) placed in the United States mail, certified, return receipt requested; or (ii) email address identified below; or (iii) deposited into the custody of a nationally recognized overnight delivery service, addressed to the party to be notified at the address for such party specified below, or to such other address as the party to be notified may designate by giving the other party no less than thirty (30) days' advance written notice of such change in address.

If to City: City of St. Charles

200 North Second Street St. Charles, MO 63301

Attention: Director of Administration <u>Lawrence.Dobrosky@stcharlescitymo.gov</u>

With a copy to: City of St. Charles, Missouri

200 North Second Street St. Charles, MO 63301 Attention: City Attorney

Michael.cullen@stcharlescitymo.gov

If to Ameren: Union Electric (Ameren Missouri)

1901 Chouteau Avenue St. Louis, MO 63103 Attention: Mark C. Birk E-mail:

With a copy to:

24. <u>Counterparts</u>. This Agreement may be executed in counterparts, each of which shall be an original, but all of which shall constitute one and the same instrument.

- 25. <u>Effective Date of Agreement; Execution Procedure</u>. This Agreement is effective when executed by the City. Ameren shall deliver two executed originals to the City no later than 5:00 p.m. on December, 2022.
- 26. <u>Number; Section Headings</u>. The section headings used in this Agreement are for reference and convenience only and shall not enter into the interpretation of this Agreement.
- 27. <u>License Access Agreement to City for Substation</u>. This Agreement shall be contingent upon a similar License Access Agreement being simultaneously executed by the City of St. Charles, as Licensee, and Ameren, as Licensor, allowing the City access to what is commonly referred to as Ameren's Huster Road substation for the purpose of performing like testing as is allowed by this Agreement.

28. <u>Entire Agreement</u>. The foregoing constitutes the entire agreement between the parties and may be modified only by a writing signed by both parties.

IN WITNESS WHEREOF the parties hereto have executed this License Agreement the day and year first written above.

LICENSEE:	LICENSOR:
UNION ELECTRIC COMPANY, d/b/a AMEREN MISSOURI	CITY OF SAINT CHARLES, MISSOURI
By Name: Mark C. Birk Title: President	By Name: Daniel J. Borgmeyer Title: Mayor
	Attest:
	City Clerk

EXHIBIT A (PREMISES)

The following provides the location identification and coordinates for each of the testing locations included within this License Access Agreement. Any additional testing locations will require additional written consent of Licensor. The locations include:

Location	X	Y
PZ-1	811374.95	1089325.06
PZ-2	811452.33	1089350.45
PZ-3	811549.98	1089385.91
PZ-4	811578.81	1089004.86
PZ-5	811596.13	1088860.34
PZ-6	811587.67	1088677.21
PZ-7	811615.18	1088714.38
PZ-8	811634.92	1088788.07
PZ-9	811579.79	1088968.45
PZ-10	811577.82	1089041.27
PZ-11	811589.80	1089400.08

EXHIBIT B

TESTING

The following test shall be allowed to be performed pursuant to this License Access Agreement. Any test not specifically listed shall require prior written consent of Licensor:

- 1. Fluid Level Monitoring in Groundwater
- 2. Groundwater Sampling for Laboratory Analysis
- 3. Influent and Effluent Sampling at the Drinking Water Treatment Plant for Laboratory Analysis

Descriptions of the testing protocols for each of the above-listed activities is provided in Exhibit C.

EXHIBIT CTESTING PROTOCOL

The Licensee shall provide the Licensor notification no less than five business days prior to the commencement of any activities that are to be performed on the premises. The notification shall include the anticipated daily start and finish time for all activities. This will allow the licensor or designated appointee to be present during the activities in the event that the Licensor elects to have a representative present during performance of the work.

Following the completion of the work, the Licensee shall provide to Licensor all field-generated data within five business days including: field notes, photographs, fluid level measurements, and field-measured groundwater parameters (i.e., dissolved oxygen, pH, temperature, oxidation-reduction potential, conductivity, turbidity). The Licensee will provide all laboratory-generated analytical reports with quality control data, as well as electronic data deliverables in a format to be provided by the Licensor. The contracted laboratory shall be instructed in writing to provide all laboratory analytical data directly to Licensee simultaneously to providing it to the Licensor.

The following testing protocol shall be employed for each of the various test identified in Exhibit B:

Exhibit C-1 – Standard Operating Procedure for Fluid Level Monitoring in Groundwater

The Licensee shall utilize the Standard Operating Procedure (SOP) for conducting fluid level monitoring in groundwater at monitoring locations on the Licensor property.

Purpose

This Standard Operating Procedure (SOP) is applicable during the conducting of water level measurements in monitoring wells, piezometers, and groundwater extraction wells during field investigations at hazardous and non-hazardous sites.

Summary of Method

The objective of water level measurements is to gain accurate measurements is to gain accurate measurements (to within 0.01 feet of the depth of groundwater for use during well installation, in the recording of data for the preparation of groundwater elevation contour maps, purge volume calculations during groundwater sampling, slug tests, packer tests, and pumping tests.

Procedures

The following provides the procedures that field technicians will follow during the measurement of fluid levels within groundwater monitoring locations.

- 1. Prior to collecting fluid level measurements, observe the condition of the well (protective casing, concrete collar, lock in place, etc.) to note any potential repairs that may need to be made to the location.
- 2. The water level indicator will be decontaminated using a phosphate-free decontamination solution and rinsed with potable water followed by a rinse with distilled water.
- 3. Identify the measuring point markings or notch on the riser or casing (if present).
- 4. Using a previously decontaminated water level indicator, turn on the meter, check the audible indicator, reel the electronic probe into the well riser (within the increments visible) slowly until the meter sounds. Grasp and withdraw the tape and lower it again slowly until the sound is again audible. Check the depth to water on the tape and record the value to within 0.01 feet on the fluid level field form.
- 5. Procedures utilized during water level measurements where free phase petroleum products are floating on the water table should be modified to include the use of an oil/water interface probe. The procedures during the use of this probe should be implemented similarly and by manufacturers' specifications. Through the use of this probe, product thickness can be determined.
- 6. Following collection of the fluid level measurement, the fluid level probe and tape should be decontaminated with the procedures described in step 2.

Exhibit C-2 – Standard Operating Procedure for Groundwater Sampling for Laboratory Analysis

The Licensee shall utilize the Standard Operating Procedure (SOP) for conducting groundwater sampling for laboratory analysis at monitoring locations on the Licensor property.

Purpose

This Standard Operating Procedure (SOP) is applicable to the collection of representative samples from groundwater for the purpose of submitting for laboratory analysis. The methods described are applicable to groundwater samples collected from either temporarily or permanently installed groundwater monitoring wells.

Summary of Method

Groundwater samples for laboratory analysis will be collected by field technicians utilizing low-flow (minimal drawdown) sampling methodology (Puls and Barcelona 1996). Low-flow sampling allows for groundwater samples to be collected that are representative of groundwater conditions, while minimizing the generation of purge water.

Procedures

The following provides the procedures that field technicians will follow during the collection of representative groundwater samples for the purpose of submitting for laboratory analysis.

- 1. Prior to the collection of any groundwater sample, groundwater elevations will be determined within the well by measuring the depth to groundwater using a SolinstTM, or equivalent, water level indicator. The depth to groundwater will be recorded to an accuracy of 0.01-foot from the surveyed measuring point indicated on the well. The water level indicator will be decontaminated using a phosphate-free decontamination solution and rinsed with potable water followed by a rinse with distilled water.
- 2. Low-flow sampling utilizes a ProActiveTM Monsoon® XL, or equivalent, submersible pump with a flow controller and dedicated low-density polyethylene (LDPE) tubing. Prior to installing the temporary groundwater sampling pump at each well location, the submersible pump will be decontaminated by washing the outer surface with a phosphate-free decontamination solution. The internal components of the pump will be cleaned by placing the pump into a 5-gallon bucket containing a phosphate-free decontamination solution and allowing the pump to operate for several minutes to circulate the decontamination solution through the impellers and pump housing. The internal and external components of the pump will be rinsed with potable water and again with distilled water prior to being connected to the dedicated LDPE tubing.
- 3. The submersible pump and dedicated tubing will be slowly lowered into the well to minimize contact with the well casing and minimize disturbance to the water column. The pump will be set to the desired depth interval and secured to ensure that the depth of the pump does not lower during the course of collecting the groundwater sample. The pumping rate should be set between 0.1 and 0.5 liters per minute using the flow controller to minimize drawdown and avoid undue pressure, temperature, or other physical disturbances to groundwater over the sampling interval. All purge water will be containerized and disposed of in accordance with federal, state, and local requirements.
- 4. Prior to engaging the sample pump, connect the sample tubing to a flow-cell that will allow for the monitoring of groundwater quality parameters including temperature, pH, specific conductance, dissolved oxygen, oxidation-reduction potential, and turbidity. The multi-parameter groundwater quality meter will be calibrated daily, in accordance with the manufacturer's guidelines, using a factory-prepared calibration standard. Groundwater quality parameters will be monitored over five-minute intervals during purging and recorded onto the field form. The following stabilization criteria will be achieved over three a minimum of three consecutive readings before collecting the groundwater sample for laboratory analysis:

• Temperature: $\pm 3\%$

• pH: ±0.1

• Specific Conductance: ±3%

• Dissolved Oxygen: ±0.3 milligrams per liter

• Oxidation-Reduction Potential: ±10 millivolts

• Turbidity: $\pm 10\%$ or < 10 nephelometric turbidity units

- 5. Once the stabilization criteria has been achieved over three successive intervals, groundwater samples can be collected in appropriate containers, which may include preservatives depending on the desired analyses. Groundwater samples should be collected in a manner to minimize headspace (if required) and agitation. The samples labels and chain of custody should be filled out completely including sample identification, date and time of collection, project name, client name, field personnel initials, requested analyses, and preservation methods. Groundwater samples should immediately be placed in a cooler with ice. Groundwater samples will be transported on ice to the laboratory for analysis. The list of analytes to be included within the laboratory analysis is provided in Exhibit C-4.
- 6. Following collection of the groundwater sample, the submersible pump should be removed from the well and decontaminated in accordance with the procedures described in step 2. The sample tubing should be disposed of in accordance with federal, state, and local requirements. The flow-cell and multi-parameter groundwater quality meter will be decontaminated using a phosphate-free decontamination solution and rinsed with potable water followed by a rinse with distilled water.

Exhibit C-3 – Standard Operating Procedure for Influent and Effluent Sampling for Laboratory Analysis

The Licensee shall utilize the Standard Operating Procedure (SOP) for conducting influent and effluent sampling for laboratory analysis at drinking water treatment plant on the Licensor property.

Purpose

This Standard Operating Procedure (SOP) is applicable to the collection of representative samples from the influent and effluent at the drinking water treatment plant for the purpose of submitting for laboratory analysis.

Summary of Method

Influent and effluent samples will be collected at the drinking water treatment plant to ensure that volatile organic compounds (VOC) are not present in drinking water.

Procedures

The following provides the procedures that field technicians will follow during the collection of representative influent and effluent water samples at the drinking water treatment plant for the purpose of submitting for laboratory analysis.

- 1. Coordinate with the Licensor to obtain access to the drinking water treatment plant.
- 2. Turn on the sample port at the influent and effluent. Purge the sample line for approximately five minutes to ensure a representative sample is collected. Water samples shall be collected in appropriate containers, which may include preservatives depending on the desired analyses. Water samples should be collected in a manner to minimize headspace (if required) and agitation. The samples labels and chain of custody should be filled out completely including sample identification, date and time of collection, project name, client name, field personnel initials, requested analyses, and preservation methods. Water samples should immediately be placed in a cooler with ice. Groundwater samples will be transported on ice to the laboratory for analysis. The list of analytes to be included within the laboratory analysis is provided in Exhibit C-4.
- 3. Following the collection of the water samples, turn off the sample port for the influent and effluent.

Exhibit C-4 – List of Analytes for Laboratory Analysis

Petroleum-Related VOCs	CAS Number
1,2,3-Trimethylbenzene	526-73-8
1,2,4-Trimethylbenzene	95-63-6
1,2-Dibromoethane	106-93-4
1,2-Dichloroethane	107-06-2
1,3,5-Trimethylbenzene	108-67-8
Benzene	71-43-2
Bromobenzene	108-86-1
Dibromomethane	74-95-3
Ethane	74-84-0

Ethyl methacrylate	97-63-2
Ethylbenzene	100-41-4
Ethylene	74-85-1
Heptane	142-82-5
Hexane	110-54-3
Isopropylbenzene	98-82-8
m,p-Xylene	179601-23-1
Methane	74-82-8
MTBE	1634-04-4
Naphthalene	91-20-3
n-Butylbenzene	104-51-8
Nitrobenzene	98-95-3
o-Xylene	95-47-6
Styrene	100-42-5
Toluene	108-88-3
Solvents	CAS Number
Tetrachloroethene	127-18-4
Trichloroethene	79-01-6
cis-1,2-Dichloroethene	156-59-2
trans-1,2-Dichloroethene	156-60-5
1,1-Dichloroethene	75-35-4
Vinyl Chloride	75-01-4
1,1,1,2-Tetrachloroethane	630-20-6

1,1,1-Trichloroethane	71-55-6
1,1,2,2-Tetrachloroethane	79-34-5
1,1,2-Trichloroethane	79-00-5
1,1-Dichloroethane	75-34-3
1,2,3-Trichlorobenzene	87-61-6
1,2,3-Trichloropropane	96-18-4
1,4-Dioxane	123-91-1
2-Butanone	78-93-3
2-Chlorotoluene	95-49-8
2-Hexanone	591-78-6
2-Nitropropane	79-46-9
4-Chlorotoluene	106-43-4
4-Methyl-2-Pentanone	108-10-1
Acetone	67-64-1
Acetonitrile	75-05-8
Acrylonitrile	107-13-1
Carbon tetrachloride	56-23-5
Chlorobenzene	108-90-7
Cyclohexanone	108-94-1
Diethyl ether	60-29-7
Ethyl acetate	141-78-6
Hexachlorobutadiene	87-68-3
n-Butyl acetate	123-86-4
Pentachloroethane	76-01-7

p-Isopropyl-toluene	99-87-6
Propionitrile	107-12-0
sec-Butylbenzene	135-98-8
tert-Butylbenzene	98-06-6
Tetrahydrofuran	109-99-9
Water Treatment	CAS Number
1,1,2-Trichlorotrifluor-ethane	76-13-1
1,1-Dichloro-2-Propanone	513-88-2
1,1-Dichloropropene	563-58-6
1,2,4-Trichlorobenzene	120-82-1
1,2-Dibromo-3-Chloropropane	96-12-8
1,2-Dichlorobenzene	95-50-1
1,2-Dichloropropane	78-87-5
1,3-Dichlorobenzene	541-73-1
1,3-Dichloropropane	142-28-9
1,4-Dichlorobenzene	106-46-7
1-Chlorobutane	109-69-3
2,2-Dichloropropane	594-20-7
2-Chloro-1,3-Butadiene	126-99-8
2-Chloroethyl vinyl ether	110-75-8
Acrolein	107-02-8
Allyl Chloride	107-05-1
Bromo-chloromethane	74-97-5

Bromo-dichloromethane	75-27-4
Bromoform	75-25-2
Bromomethane	74-83-9
Carbon Disulfide	75-15-0
Chloroethane	75-00-3
Chloroform	67-66-3
Chloromethane	74-87-3
cis-1,3-Dichloropropene	10061-01-5
cis-1,4-Dichloro-2-butene	1476-11-5
Dibromo-chloromethane	124-48-1
Dichloro-difluoromethane	75-71-8
Hexachloroethane	67-72-1
Methacrylonitrile	126-98-7
Methyl acrylate	96-33-3
Methyl iodide	74-88-4
Methyl methacrylate	80-62-6
Methylene chloride	75-09-2
n-Propylbenzene	103-65-1
trans-1,3-Dichloropropene	10061-02-6
Trans-1,4-Dichloro-2-Butene	110-57-6
Trichloro-fluoromethane	75-69-4
Vinyl acetate	108-05-4
Inorganics	CAS Number

Nitrogen, Nitrate (as N)	14797-55-8
Nitrogen, Nitrite (as N)	14797-65-0